

### PRELIMINARY REMARKS

In the Office communication of August 18, 2003, the Examiner acknowledged that the Declaration by Jeffrey Todd Aplin shows that the particle size of products produced by the instant claimed process is larger than the prior art products. However, the Examiner felt there should be a side-by-side comparison that the larger particle size is advantageous over the prior art particle sizes.

Such a showing is made herein. As is well known in the art, *e.g.*, see U.S. Pat. No. 4,560,766 and WO 97/43264, dusting of additives is a very undesirable problem and various ways of converting powder into larger size particles have been described. The record now shows that the present invention provides a way of producing, *ab initio*, larger particles that have reduced dusting tendencies.

At the request of the attorneys of record, additional tests were carried out. It is submitted that, in light of the data presented in the Declaration, the Examiner's rejections are overcome, and that the case is now in condition for allowance.

The 1,3-dibromo-5,5-dimethylhydantoin sample from Example 10 in Column 5 of Waugh et al. U.S. Pat. No. 3,121,715 was tested at low relative humidity and at 45% relative humidity. At low humidity, this sodium carbonate treated sample produced more dust than any of the other samples tested. In this low humidity test, none of the sample material adhered to the walls of the test chamber. At 45% relative humidity, no measurable dust was found. However, it was discovered that much of the sample material had adhered to the walls of the test chamber, and that the remaining sample material had agglomerated into globules. This was the only sample for which adhesion to the walls and agglomeration were observed. Adhesion and agglomeration are considered disadvantageous properties, especially for further processing of these compounds, *e.g.*, into compacted articles.

Two types of 1,3-dibromo-5,5-dimethylhydantoin samples from Example III in Column 4 of Cole U.S. Pat. No. 4,621,096 were tested. One sample was not water washed after the

calcium hydroxide treatment, while the other sample tested was water washed following the calcium hydroxide treatment. Both samples were tested at 45% relative humidity. Both of these samples released respirable dust, with the water-washed sample releasing more than the sample that had not been water washed.

A 1,3-dibromo-5,5-dimethylhydantoin sample of Albemarle product made in accordance with a process of the present application was also tested. This sample released less respirable dust than any of the other samples, except the 45% humidity sodium carbonate treated sample, which had agglomerated.

In view of the new showings, there is no question that there are beneficial results obtained by the present invention. The hazards of dusts are well-known, and the present invention minimizes these hazards. In addition, the present invention makes it possible to have non-agglomerating products, a desirable feature, especially in combination with low dusting. Thus, notice of allowability of the claims would be sincerely appreciated.

Respectfully submitted,



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### **CERTIFICATE OF MAILING**

I hereby certify that in accordance with standard business practice, this paper (along with any referred to as being attached or enclosed) is to be deposited on the date shown below with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop RCE; Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

December 19, 2003

Date

  
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